NEW COMBINATIONS IN STEVIA (ASTERACEAE: EUPATORIEAE)

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Preparation of a treatment of Stevia for Mexico has necessitated the following new combinations:

STEVIA SCABRELLA Benth. var. VENOSA (A.Gray) B. Turner, comb. nov.

Based upon Stevia venosa A.Gray, Proc. Amer. Acad. Arts 21:382.1886.

Grashoff (1972) placed this taxon, along with S. scabrella, within his shrubby series Fruticosae, largely because these appear to have a "sub-shubby" or fruticose habit. I believe, however, that these are perhaps best placed in the herbaceous series Corymbosae where they presumably relate to S. plummerae A. Gray. I would also include with these several taxa S. urceolata Grashoff, which Grashoff (1974) also relates to S. scabrella. All of these are so similar in head and floret structure, as to details, that it is difficult to emphasize habit as a major feature separating them.

Grashoff (1972) maintained S. venosa as distinct from S. scabrella largely on the basis of "its smaller, narrower leaves, less pubescent infloresence branches, smaller and obtuse to rounded phyllaries, bright pink or lavender flowers and smaller achenes." Nevertheless, McVaugh (1984) included S. venosa as a synonym of S. scabrella with the observation that "on specimens assigned by Grashoff to venosa, the phyllaries are often acute and up to 7 mm long, the corollas often 6.5-7 mm long, and the achenes up to 4 mm long, as they often are in scabrella... Until the differences between scabrella and venosa can be more adequately demonstrated, they are best combined as a single species."

I tend to agree with McVaugh's observations. Certainly character intergradation occurs, at least occasionally, in the numerous specimens from Chihuahua cited by Grashoff as S. venosa. Nonetheless the combination of characters (taken as a syndrome), noted by Grashoff , do appear to mark S. venosa and these appear to be largely restricted to Chihuahua and adjacent Sinaloa. Fig. 1 shows the distribution of the two varieties as currently known. The single collection from Morelos is based upon Lyonnet 801 (Cempoala, Nov, 1932; LL!) and is cited by

Grashoff (1972).

A series of recent collections of S scabrella collected by Ms Gonzalez and colleagues from about the city of Durango clearly shows that regional intermediates between S. venosa and S scabrella occur, largely vindicating McVaugh's observations. The collections concerned, nine individuals from as many populations, mostly from areas to the south and southeast of Durango city, have narrow leaves like S. venosa, and pink corollas, and the involucral bracts are mostly 6-7 mm long with acute apices approaching those of S. scabrella. In any case, I feel confident that future workers will recognize but a single species, S. scabrella, with some workers also wishing to recognize the regional variations represented by S. venosa, hence the combinations proposed above.

Finally, it should be noted that Stevia urceolata Grashoff may be a dwarf form, or perhaps populational variant, of S. scabrella, as noted by McVaugh (1984). It was compared to the latter species by Grashoff (1974), and from the illustration and description provided, I can find few, if any, characters for specific recognition, other than leaf size (1.0-2.5 cm long, 3-6 mm wide).

STEVIA HINTONII (Grashoff) B. Turner, comb. Nov.

Based upon Metastevia hintonii Grashoff, Brittonia 27:69.1975.

Grashoff presented a tedious and ernest attempt to erect this taxon as the monotypic genus, Metastevia. In spite of emphasis upon several characters which are more-or-less unique to S. hintonii, most notably the obconical or clavate achenes which are devoid of pappus scales, I do not find sufficient grounds for excluding the species from Stevia. Even Grashoff concludes that "the genus Metastevia is quite obviously, very similar to Stevia, and it appears to have been derived directly from Stevia series Podocephalae" (sensu Grashoff, 1972). This being so, S. hintonii would appear to be a paraphyletic element of Stevia proper.

LITERATURE CITED

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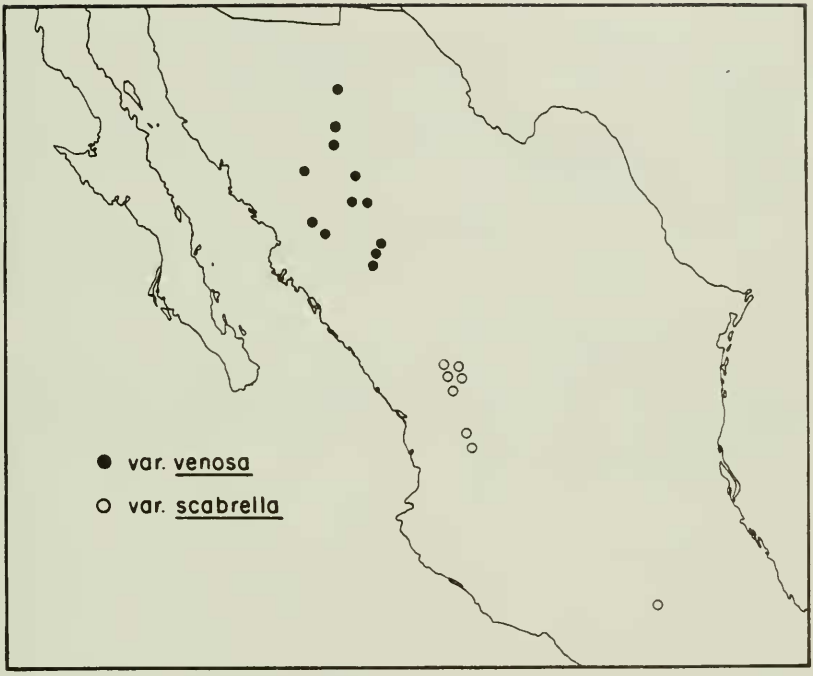

Fig. 1. Distribution of Stevia scabrella.